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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,828	05/22/2001	Neil W. Taylor	971-128	8874

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EXAMINER

SON, LINH L D

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/862,828

Applicant(s)

TAYLOR, NEIL W.

Examiner

Linh LD Son

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This written action is responding to the amendment dated 02/14/05.
2. Claims 1, 2, 8, 11, 12, 16, 21, and 22 are amended. Claims 1-22 are pending.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-10, 12-17, and 19-20, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Angelo, US Patent No. 5944821.

5. As per claims 1 and 16, Angelo discloses "A method for validating executable code resident in an operating system having executable instructions" in (Col 11 lines 50-60), "comprising the steps of: identifying an executable code having an unaltered size" in (Col 10 lines 39-52); "calculating a score associated with the executable code when the executable code is initially or shortly thereafter loaded into an operating system; saving the score; and calculating a subsequent score on the executable code; comparing the subsequent score to the saved score" in (Col 9 lines 13-20, Col 9 lines 45-50, Col 9 line 65 to Col 10 line 8, and Col 10 lines 39-52); "if the subsequent score

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does not vary from the saved score, concluding the executable code maintains the unaltered size" in (Col 10 lines 16-29); and "if-the-subsequent score varies from the saved score, concluding the executable code has an altered size" in (Col 39-52).

6. As per claims 2 and 18, Angelo discloses "The method of claims 1 and 8, further comprising the steps of: unloading the executable code from the operating system if the saved score is not equal to the subsequent score" in (Col 10 lines 31-38, and Figure 3)

7. As per claims 3 and 17, Angelo discloses "The method of claims 1 and 16, further comprising the steps of: disabling at least a portion of the executable code if the saved score is not equal to the subsequent score" in (Col 10 lines 40-52).

8. As per claims 4 and 10, Angelo discloses "The method of claim 1, wherein the scores are the result of a checksum calculation" in (Col 2 lines 40-45).

9. As per claim 6, Angelo discloses "The method of claim 5, further comprising the steps of: disabling at least a portion of the executable code if the saved score is not equal to any of the additional scores" in (Col 10 lines 50-52).

10. As per claims 7, 9, and 20, Angelo discloses "The method of claims 1, 8, and 16, further comprising the steps of: notifying electronically an owner of the executable code if the saved score is not equal to the subsequent score" in (Col 10 lines 50-52).

11. As per claims 8-9 and 22, Angelo discloses "A method for disabling executable code which has been modified without authorization having executable instructions" in (Col 11 lines 50-60), "comprising the steps of: identifying an executable code having an unaltered format; calculating a score associated with an the executable code; calculating one or more subsequent scores associated with the executable code" in (Col 11 lines 50-60, and Col 12 lines 1-10); "determining the executable code has an altered format if the score is not equal to any of the subsequent scores: and disabling the executable code if the score is not equal to any of the subsequent scores" in (Col 12 lines 24-41).

12. As per claim 14, Angelo discloses "The method of claim 8, further comprising the steps of: assisting in the loading of the executable code, if not disabled, to a memory of an operating system wherein the executable code resides" in (Col 9 lines 45-65).

13. As per claim 15, Angelo discloses "The method of claim 8, further comprising the steps of: registering the executable code if not disabled; and recording a history if the executable code is disabled" in (Col 10 lines 53-57).

14. As per claim 19, Angelo discloses "The method of claim 16, wherein the subsequent score is received each time the executable code is initiated in the memory for an execution" in (Col 10 lines 16-28).

15. As per claim 20, Angelo discloses "The method of claim 16, reporting one or more system events and variables when the subsequent score is not equal to the score" in (Col 10 lines 50-52).

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 5, 11, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angelo in view of Safadi, US Patent No. 6742121B1.

18. As per claims 5, 11, and 18, Angelo discloses "The method of claims 1, 8 and 16". However, Angelo does not disclose "further comprising the steps of: receiving one or more additional scores periodically on the executable code and disabling the executable code if the subsequent score is not equal". Nevertheless, Safadi discloses the feature clearly in (Col 8 lines 5-22). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Angelo's invention to incorporate Safadi's method to have total controlling and tracking of the program code before and while executing even though the code is in a protected memory during execution (Angelo, Col 11 lines 50-65).

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19. As per claim 21, Angelo discloses "Functional data used to validate executable code embodied in a computer readable medium" in (Col 11 lines 50-60), "the data comprising: an unaltered original format: a first score associated with an executable code when the executable code is initially loaded into an operating system" in (Col 11 lines 50-60, and Col 12 lines 1-10); However, Angelo does not disclose "a second score associated with the executable code at a period of time subsequent to when the executable code was initially loaded and operable to be compared with the first score to determine if the executable code has been altered since the initial load: and an altered unoriginal format if the first and second scores do not equal". Nevertheless, Safadi discloses the "Detection of Suspect software objects and signatures after failed authentication" invention, which includes a method above in (Col 8 lines 5-22). Therefore, it is obvious at the time of the invention was made for one having ordinary skill in the art to modify Angelo's invention to incorporate Safadi's method to have total controlling and tracking of the program code before and while executing even though the code is in a protected memory during execution (Angelo, Col 11 lines 50-65).

### ***Response to Arguments***

20. Applicant has amended claims 1, 2, 8, 11, 12, 16, 21, and 22, which necessitated new grounds of rejection. See Rejections above.

### ***Conclusion***

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### **Conclusion**

22. Any inquiry concerning this communication from the examiner should be directed to Linh Son whose telephone number is (571)-272-3856.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Kim Y. Vu can be reached at (571)-272-3859. The fax numbers for this group are (703)-872-9306 (official fax). Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2100.



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24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see <http://pzr-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**Linh LD Son**

**Patent Examiner**